



**UNITED STATES DEPARTMENT OF COMMERCE**  
**United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/113,491 07/10/98 CALLON

R IBN.5183

EXAMINER

WM01/0905

STEVEN M MILLS  
SAMUELS GAUTHIER & STEVENS  
225 FRANKLIN STREET  
SUITE 3300  
BOSTON MA 02110

NGUYEN, T

ART UNIT

PAPER NUMBER

2663

DATE MAILED:

09/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
09/113,491

Applicant(s)  
Ross W. Callon et al.

Examiner  
Toan Nguyen

Art Unit  
2663



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jul 10, 1998
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle* 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22, 27-34, and 39-50 is/are rejected.
- 7) ☒ Claim(s) 23-26 and 35-38 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirements.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 6 and 9 20) ☐ Other:

Application/Control Number: 09/113,491

Art Unit: 2663

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under U.S.C. 102(b) as being anticipated by Moy (U.S. Patent 6,031,817).

For claim 1, Moy discloses system and method for providing notification of malfunctions in a digital data network, comprising:

at least one switching node in the network pre-establishing a bypass virtual circuit through the network through at least one other switching node in the network and over respective ones of said communication links to define a path through said network that bypass at least one of said communication links connected to said at least one switching node and another switching node which is also connected to said at least one of said communication links (see figure 1, col. 3 lines 20-57),

the at least one switching node transferring ones of said digital packets, which it would otherwise transfer to the another switching node, over the bypass virtual circuit in the event of a

malfunction of the respective at least one of said communication links and said another switching node (col. 3 lines 58-66).

3. Claims 2-12, 14, 20-22, 27-31, and 33 are rejected under U.S.C. 102(b) as being anticipated by Endo et al (U.S. Patent 5,764,624).

For claims 2, 4, 6-7, 9-12, 14, 27, 30-31, and 33, Endo et al disclose ATM switching system and path changing method, comprising:

for at least one of the nodes, generating and storing an alternate output route out of the node such that, in the event that data to be transferred toward a destination node cannot be forwarded to the next successive node over the link associated with the destination node, the at least one of the nodes can forward the data over the alternate output route toward the destination node (see figure 9A, col. 7 lines 44-48); and

after generating and storing the alternate output route, if data to be transferred toward a destination node can not be forward to the next successive node over the link associated with the destination node, forwarding the data over the alternate output route toward the destination node (col. 7 lines 48-52).

For claims 3, 21, and 28, Endo et al disclose the alternate output is a connectionless route (see figure 11, col. 8 lines 4-7).

For claims 5, 8, 22, and 29, Endo et al disclose the alternate output route is a connection-oriented route (col. 9 lines 10-20).

For claim 20, Endo et al disclose at least one node of the network is capable of operating in both a conectionless environment and a connection-oriented environment (col. 8 lines 4-7, and col. 9 lines 10-20).

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 15-19, 34, 39, and 40-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al (U.S. Patent 5,764,624) in view of Moy (U.S. Patent 6,031,817).

For claims 15-19, and 34, Endo et al do not disclose the information that data can not be transferred between the at least one of the nodes and the next successive node includes a time at which nodes receiving the information should perform a recovery operation such that recovery operations at a plurality of nodes on the network are synchronized. Moy from the same or similar field of endeavor teach the information that data can not be transferred between the at least one of the nodes and the next successive node includes a time at which nodes receiving the

information should perform a recovery operation such that recovery operations at a plurality of nodes on the network are synchronized (col. 9 lines 3-26). Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the combined system and method for providing notification of malfunctions in a digital data network as taught by Moy in ATM switching system and path changing method of Endo et al. The motivation for using the combined system and method for providing notification of malfunctions in a digital data network as taught by Moy in ATM switching system and path changing method of Endo et al being that for each communication link 13(p) identified in an advertising message received by the switching node 11(n), the switching node 11(n) will compare the instance value identified for the communication link in the advertising message packet to the instance value which it (col. 5 lines 32-37).

For claims 39, 45-46, and 50, Endo et al disclose a method of recovering from failures on a network having a plurality of nodes coupled by links over which data can be transferred between the nodes, each of a plurality of nodes storing information that associates links out of the node with destination nodes to which data can transferred such that the node can forward data out of the node over a link to a next successive node toward an associated destination node, said method comprising providing to other nodes on the network, in the event that data to be transferred toward a destination node cannot be forwarded to the next successive node over the link associated with the destination node, information that data cannot be transferred between the at least one of the nodes and the next successive node (see figure 9A, col. 7 lines 44-48, and col. 7 lines 48-52). Endo et al do not disclose said information including a time at which nodes receiving the information should perform a recovery operation such that recovery operations at a plurality

of nodes on the network are synchronized. Moy from the same or similar field of endeavor teach the information that data can not be transferred between the at least one of the nodes and the next successive node includes a time at which nodes receiving the information should perform a recovery operation such that recovery operations at a plurality of nodes on the network are synchronized (col. 9 lines 3-26). Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the combined system and method for providing notification of malfunctions in a digital data network as taught by Moy in ATM switching system and path changing method of Endo et al. The motivation for using the combined system and method for providing notification of malfunctions in a digital data network as taught by Moy in ATM switching system and path changing method of Endo et al being that for each communication link 13(p) identified in an advertising message received by the switching node 11(n), the switching node 11(n) will compare the instance value identified for the communication link in the advertising message packet to the instance value which it (col. 5 lines 32-37).

For claims 40-41, Moy discloses the recovery operation comprises updating a routing table for at least one updating node on the network (col. 9 lines 18-26).

For claims 42 and 47, Endo et al disclose at least a portion of the network operates in a connection-oriented configuration (col. 9 lines 10-20).

For claims 43 and 48, Endo et al disclose at least a portion of the network operates in a connectionless configuration (see figure 11, col. 8 lines 4-7).

For claims 44 and 49, Endo et al disclose at least one node on the network is capable of operating in both a connectionless environment and a connection-oriented environment (col. 8 lines 4-7, and col. 9 lines 10-20).

### **Objection To Claims, Allowable Subject Matter**

6. Claims ~~23-26~~, and ~~35-38~~ are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,031,817 to Moy, discloses System And Method For Providing Notification Of Malfunctions In A Digital Data Network.

U.S. Patent 5,764,624 to Endo et al, discloses ATM Switching System And Path Changing Method.

U.S. Patent 6,163,525 to Bentall et al, discloses Network Restoration.

U.S. Patent 5,016,243 to Fite, Jr., discloses Automatic Fault Recovery In A Packet Network.

U.S. Patent 5,781,529 to Liang et al, discloses Systems And Methods For Routing ATM Switched Virtual Circuit Calls..

U.S. Patent 6,272,107B1 to Rochberger et al, discloses Method Of Path Restoration In AN ATM Network Utilizing Point To Points Switched Virtual Circuits.



*Contact Information*

8. Any response to this action should be mailed to:  
Assistant Commissioner for Patents  
Washington, D.C. 20231
9. Hand-delivered responses should be brought to Crystal Park II,  
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).
10. Any inquiry concerning this communication or early communications should be directed to  
Toan Nguyen whose telephone number is (703) 305-0140. He can be reached Monday through  
Friday from 7:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chau Nguyen, can be reached at (703) 308-5340. The fax phone number for this Group is (703)-872-9314.

Any inquiry of a general nature or relating to the status of this application should be direct to the Group receptionist whose telephone number is (703) 305-9600.

TN  
T.N.



DANG TON  
PRIMARY EXAMINER